120° F. until all soluble gelatin is removed. Under-exposure is indicated by the high-light detail washing away, and over-exposure by the film being insoluble to too great a depth. The plates are then rinsed in cold water, fixed in hypo, and washed free of the hypo. They are then ready for staining.

The staining is done with a one per cent. solution of dye containing one per cent. of acetic acid, the dye being selected to simulate most closely the original stain of the section, the time of dyeing being chosen so that the necessary depth is obtained.

When sections stained with two different colours are being photographed, negatives are made through suitable colour-filters, and are then dyed in the two stains and placed face to face so that a two-colour slide is obtained.

Suppose a section is stained red and green. Two negatives are made on panchromatic plates—one with a red filter, which will cause the green to appear as clear spaces in the negative and will not record the red, and the other with a green filter, which will record the red and not the green. The slides made as described from these in bichromated gelatin are stained—that from the red negative with the original green stain, and that from the green negative with the original red stain.

The filters required can be chosen from the set of filters for photomicrography prepared under the name of Wratten M filters. The choice of the filter is decided by visual trial under the microscope, the filters chosen being those which most nearly absorb one colour and transmit the other. Thus, photographing a section stained with Delafield's hæmatoxylin and precipitated eosin, the A filter (red) shows no trace of the eosin, and gives a good, strong negative of the hæmatoxylin. The B and C filters are used together for the other negative, giving a blue-green colour and recording the eosin and hæmatoxylin both fully, and from these two negatives positives are made and stained with a blue and a red dye.

A SHORT METHOD OF PREPARING HISTOLOGICAL MATERIAL

Dr. L. W. Strong, Pathologist, Woman's Hospital, New York City, published the following modification of current histologic methods in the Journal of the American Medical Association for

June 17, 1916. This method was devised to shorten the time for making reports on histologic specimens, and I find that it is in every respect equal to the regular routine procedure. The time is reduced to three days together with a considerable saving in labor and reagents.

1. Fix: 10% liquor formaldehyde in 80% alcohol, over night.
2. 95% alcohol, 8-10 hours.
3. Acetone, from one-half to two hours.
4. Chloroform-paraffin, over night in warm place.
5. Paraffin, four hours. 48° C., m. p., 2 hours; 52° C., m. p., 2 hours.
6. Embed.

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ORGANIC EVOLUTION

This book is a comprehensive statement of the more important facts and theories relating to organic evolution. It contains a perfectly stupendous amount of material, gathered and organized from various sources, and is based on the author's twenty-three years of teaching. The excellence of the contribution is in this organization rather than in originality of conception or statement. It is quite safe to say that the result will prove a boon to the student and teacher, as a carefully worked out compend.

This volume differs from the general run of such books published in the last fifteen years, by its larger emphasis upon the geological illustrations and its fuller treatment of the palæontological data.

The book is divided into three parts. Part I includes six chapters on the history of the idea of evolution; the organic kingdom; classification; geographic, bathymetric and geological distribution. Part II, under the general title "Mechanism of Evolution," treats in six chapters such subjects as natural, sexual and artificial selection, variation and mutation, heredity, inheritance of acquired characters, orthogenesis and kinetogenesis. Part III, of twenty-six chapters, entitled "Evidences of Evolution," is sub-divided into three sections: ontogeny; morphology and adaptations; and Palæontology.